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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/513,043	02/25/2000	Philip Gilchrist	CE03599RP01	6989

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SCHAUMBURG, IL 60196

EXAMINER
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GEORGE, KEITH M

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/513,043

Applicant(s)

GILCHRIST ET AL.

Examiner

Keith M. George

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6, 11 and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Perkins et al., U.S. Patent 5,442,633, hereinafter Perkins '633.

3. Referring to claim 1, Perkins '633 teaches a method for routing a packet of information between two hosts that are coupled to a network (method of routing data in a communication system). Each of the hosts have a unique network address, and at least one of the hosts is a mobile host (wherein the first remote unit is a mobile unit). Perkins '633 goes on to teach the method of communications between the two devices, including a step of transmitting a reply packet from the second host to the mobile host via the base access station (BSS) in accordance with a path reversal technique. As a result, the reply packet is directed through the network to the base access station (BSS) that serves the current physical location of the mobile host, and an optimal, fast routing of the packet is achieved without involving intermediate gateways (packet data gateway) (figure 2, 16 and 18) (transferring a routing function from a packet data gateway to a Base Station System without routing the data through the packet data gateway) (abstract).

4. Referring to claim 2, Perkins '633 teaches the method described in reference to claim 1 above and also teaches that by supplying the associated BAS address (BSS) in each reply NPDU,

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a MH (Mobile Host) informs the originator of the packet traffic about its most current network location. By using the address of the BAS recipient, the originator of the traffic is enabled, in effect, to track the most current location of the recipient of the traffic (transferring the routing function from the BSS to a second BSS) (column 9, lines 59-65). It is clear from the description that the routing will transfer from one BAS to another BAS as the MH moves from the coverage area of one BAS into another BAS.

5. Referring to claim 3, Perkins '633 teaches the method described in reference to claims 1 and 2 above where it was clearly shown that the MH (first or second remote unit) informs the originator of the packet traffic about its most current location. It is clear that the MH is requesting the transfer of the routing function.

6. Referring to claim 4, Perkins '633 teaches the method described in reference to claims 1 and 2 above where it was clearly shown that the transfer of routing function occurs when the MH moves from the coverage area of one BAS into another BAS (reselection of a cell).

7. Referring to claim 6, Perkins '633 teaches the method described in reference to claim 1 above and also teaches that when a MH moves from one Level 2 subnetwork to another (moved outside of the local area), while communicating with another host, the first NPDU sent to the MH would go through the MR (Packet Data Gateway) that acts as the proxy for the MH (column 9, lines 21-25).

8. Referring to claim 11, Perkins '633 teaches the method described in reference to claims 1-4 above where it has been clearly shown that the identity of the originator (second remote unit) is known, otherwise it would not be possible to inform the originator of the current location of the MH (first remote unit).

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9. Referring to claim 12, Perkins '633 teaches the method described in reference to claim 1 above and also clearly teaches that as a MH (first remote unit) moves between different Level 2 subnetworks, the MR that is currently acting as a proxy for the MH is informed of the MHs location (context), via the BAS (base station receiving uplink information from a first remote unit). Perkins '633 goes on to teach that a reply packet is directed through the network to the base access station (BSS) that serves the current physical location of the mobile host, and an optimal, fast routing of the packet is achieved without involving intermediate gateways (bypasses network elements external to the local network).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins '633.

Perkins '633 teaches the method described in reference to claim 1 above but possibly fails to specifically disclose transmitting billing and statistics from BSS to the packet data gateway.

Perkins '633 discloses that control information is transmitted between the BSS and packet data gateway. Official notice is taken that transmission of billing and statistical information between network elements in a telecommunication system is notoriously old and well known. Therefore, it would have been obvious to an ordinary person skilled in the art at the time of the invention to

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include transmission of billing and statistics with the method of Perkins '633 in order for recover the cost of the usage and make a profit on the network.

12. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins '633 in view of Perkins, U.S. Patent 5,159,592, hereinafter Perkins '592. Perkins '633 teaches the method described in reference to claim 1 above with the possible exception of returning the routing function from the BSS to the Packet Data Gateway based on a request from the Packet Data Gateway, based on a context modification or based on a length of inactivity of the first remote unit. Perkins '592 teaches that being out of touch (context modification and length of inactivity) for a predetermined time causes the mobile unit's local gateway to notify the global gateway that the mobile unit is not longer a member of the group. In response to being notified of the disappearance of the mobile unit, the global gateway terminates the forwarding of packets that are direct to the inactive mobile unit (based on a request from the Packet Data Gateway) (column 5, lines 34-42). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement the "out of touch" scenario taught by Perkins '592 in the method of routing a packet in a communication network taught by Perkins '633. One of ordinary skill in the art would have been motivated to do this because Perkins '633 states that the gateway may include components for maintaining and allocating pseudo-IP addresses to the MHs as described in the commonly assigned U.S. Patent application Ser. No. 07/605,592 (now U.S. Patent 5,192,592) (column 5, lines 29-33).

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins '633 in view of Kimball, U.S. Patent 5,953,322, hereinafter Kimball. Perkins '633 teaches the method described in reference to claim 1 above with the possible exception of providing interconnection

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to a circuit switched network. Kimball teaches that voice call data packets are recovered according to the protocol of the PSTN which is a circuit switched network (a packet data communication can be converted to a PSTN call and interconnected to a circuit switched network) (column 5, lines 6-10). It would have been obvious to a person of ordinary skill in the art at the time of the invention to include providing interconnection to a circuit switched network as taught by Kimball with the method of Perkins '633 in order to increase scalability of the system by allowing the user to communicate of users on the different networks.

### ***Response to Arguments***

14. Applicant's arguments filed 16 April 2004 have been fully considered but they are not persuasive.

15. On page 7 of the Amendment and Response, applicant argues that Perkins '633 does not teach transferring a routing function from a packet data gateway to a Base Station System. In response, claims are given their broadest reasonable interpretation in light of the specification. While the terminology of Perkins '633 may not be identical to applicant's claim language, the claim limitations do not contain a specific definition that would differentiate these terms.

16. On page 8, applicants ask the Examiner to explicitly explain what routing function is transferred in Perkins '633 (and from whom and to whom). In response, the routing function in Perkins '633 is transferred from the Mobile Router to the Base Access Station. As described clearly in column 3, lines 17-51, first the mobile router advertises to the network the network address of the mobile router and also the network address of network associated with the mobile hosts. If it is determined that the mobile host is currently located within the physical area served

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by the base access station, the method forwards the reply packet from the base access station over the wireless link to the mobile host. In contract, Perkins '633 goes on to teach that if the mobile is not in the physical area served by the Base Access Station, then the reply is forwarded to the mobile router. This clearly addresses applicants further argument that Perkins '633 does not transfer routing based on the determination that the remote unit is within the local network.

### ***Conclusion***

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith M. George whose telephone number is 703-305-6531. The examiner can normally be reached on M-Th 7:00-4:30, alternate F 7:00-3:30.



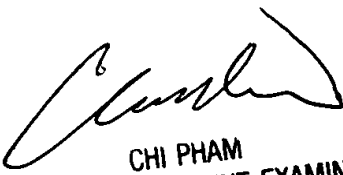
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Keith M. George  
21 June 2004



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